

Using ePeGs to Create an Effective Education Technology (Ed-tech) Plan

The DESE ePeGs tool helps districts develop and implement comprehensive school improvement plans (CSIP), education technology plans, and other plans required by the Department. This document provides guidance for how districts can use ePeGs for tech plan development and provides examples of how integrated educational technologies can be incorporated to meet district goals and objectives. The examples are general and should be personalized to focus on a district's particular needs, existing resources, etc. **MSIP** and **METSP** notations indicate where strategies align with the MSIP process standards and indicators and the 2007-11 Missouri Education Technology Strategic Plan (METSP) focus areas and major strategies. [See: <http://dese.mo.gov/divimprove/instrtech/techplan/documents/2007-11METSP-Sept2008.pdf>.]

PLAN ELEMENTS

Mission Statement and Needs Assessment

Technology planners should note that these sections of the ePeGs are for overall district use and are not recreated for specific plans such as the ed-tech plan. As such, technology planning committees are encouraged to meet with district staff responsible for CSIP planning to make sure technology is addressed appropriately. While the ed-tech approval criteria no longer require a specific technology mission statement, appropriate tech-related needs assessment is still critical. Tech plan reviewers will look to see that various data are used to assess the needs of students, teachers and administrators in being able to access and use technology effectively to meet personal, academic, and career goals.

Goals, Objectives, Strategies, and Action Steps

The ePeGs Goal, Objective, Strategy, and Action Step pages follow the basic planning structure: users select a goal first, then objective, then strategy, then action step (if needed). While the system is designed to work on one action (goal, objective, strategy) at a time, objectives and/or strategies may be applied to multiple plans.

- **Goals** – Many districts require all other plans to align with district CSIP goals. ePeGs lists five goals that are common to most CSIPs, addressing student performance, highly qualified staff, facilities/support/instructional resources, parent/community involvement, and governance. Districts may choose to use one or all of these goals or create their own. The system will allow one to seven goals, of which two may be district-defined.
- **Objectives** – Establish one or more objectives for each goal. Objectives represent specific targets and must be measurable. Long-range objectives include specific performance measures to report annual progress toward achieving the objective.
- **Strategies** – Itemize one or more strategies for each objective. Strategies detail how the objective will be accomplished; they identify the programs and practices to be implemented, the persons responsible, the resources committed to the strategy, and timelines for implementation. Note that objectives and/or strategies may be applied to multiple plans.
- **Action Steps** – Strategies that are broad, complex, or require a number of years to implement should include action steps. Action steps divide the strategies into more specific responsibilities and activities that are necessary to fully implement the strategy. Action plans will also indicate responsible persons, resources, and timeline.

Evaluation – Additional Element

Beyond noting progress on objectives, ed-tech plans require specific evaluation and technology plan assurances. Under additional elements, districts must describe the process and accountability measures the district will use to evaluate the extent to which strategies and action steps are effective. And, districts must check the assurance box, indicating the district meets the technology plan elements required by the Universal Service Fund and E-rate program.

SAMPLE TECHNOLOGY-RELATED OBJECTIVES, STRATEGIES, AND ACTION STEPS

CSIP Goal: Student Performance (METSP TFA: Student Learning)

Goal The district might use the suggested student performance goal or establish its own goal “The district will develop and enhance quality education and instructional programs to improve student performance and enable students to meet personal, academic, and career goals.”

Objectives Related objectives might include 1) “By 2012 all students in grades K-8 will read at or above the 75thile as measured by [X standardized assessment] through implementation of the eMINTS instructional model,” 2) “To “increase the percentage of students who meet technology literacy standards by the end of eighth grade as measured by [X tool],” and/or 3) “Technology will be fully integrated into the curricula and instruction for all students by June 2011.”

Strategies and/or action steps Following are technology-related actions the district might take in trying to reach the stated objectives:

- All students will engage in rigorous instruction driven by technology-enriched curriculum that meets students’ assessed needs, results in high levels of academic achievement and performance, and fosters life-long learning. (MSIP 6.1, 6.3) (METSP S1, S2)
- Written curriculum will incorporate content and processes related to equity, technology, research, and workplace readiness skills. (MSIP 6.1, 6.8, 7.3) (METSP S1)
- District will align local curriculum with NETS*S, the National Educational Technology Standards for Students (or equivalent). (MSIP 6.1, 6.4, 6.8) (METSP S1)
- District curriculum will inspire educators to use research-based instructional strategies (such as eMINTS or equivalent) that are powered by technology and engage diverse learners in the excitement of learning through student-centered, collaborative, project-based, and inquiry-based activities, and promote research, problem-solving, and communication. (MSIP 6.1, 6.4, 6.8) (METSP S1)
- District will use technology to extend and support student learning beyond the school day and provide access to rigorous courses via alternative instructional delivery systems (such as I-TV, web-based, and other distance learning systems). (MSIP 6.3) (METSP S1, S2)
- District curriculum will utilize technology in developing students’ 21st century skills (information, communication technology, and media literacy). (MSIP 6.3, 6.4, 6.8) (METSP S2)
- District will use technology to enable/enhance career and post-secondary planning. (MSIP 6.3, 6.4, 6.8, 7.3) (METSP S1, S2)
- District will use technology to help deliver, monitor, and assess student learning to meet student needs (such as integrated learning systems, computer-assisted instructional software, and electronic assessment tools). (MSIP 6.1, 6.2, 6.3, 7.1, 7.2, 7.3) (METSP S1)

CSIP Goal: Highly Qualified Staff (METSP TFA: Teacher Preparation)

Goal “The district will recruit, train, and retain highly qualified staff to carry out district mission, goals, and objectives.”

Objectives 1) “By 2012, all teachers will implement inquiry-based instructional strategies as measured by [X assessment],” 2) “All teachers and students will have access to educational technology comparable to the state average,” 3) “To provide professional development opportunities for teachers and administrators to develop capacity to effectively integrate technology into teaching and learning,” and/or 4) “Staff will improve their level of proficiency in using technology as measured by [X tool].”

Strategies and/or action steps: (*Highly Qualified Staff goal*)

- All teachers will [develop or implement newly developed] inquiry-based curricula and instruction, and are afforded support of, access to, and appropriate training for using technology to implement, deliver, monitor, and assess such curricula and instruction. (MSIP 6.7) (METSP T1, T2)
- Teachers will use up-to-date technology tools and resources to support curriculum objectives; tools and resources are readily available for teacher and student use; and training in the use of the tools and resources (such as eMINTS or equivalent) is provided. (MSIP 6.4, 6.7, 6.8) (METSP T1, T2)
- District will promote and provide effective leadership and professional development that promotes differentiated instruction through the use of technology and makes adequate plans for sustained and beneficial growth in technology integration and educator proficiency; district will use technology to help provide professional development (e-Learning for Educators program or equivalent). (MSIP 6.3, 6.4, 6.7, 6.8) (METSP T1, TS1)
- District will provide professional development for teachers and administrators that result in technology proficiency; professional development is aligned with NETS*T and NETS*A, the National Educational Technology Standards for Teachers and Administrators (or equivalent). (MSIP 6.4, 6.7, 6.8) (METSP T1, T2)

CSIP Goal: Facilities, Support, and Instructional Resources (METSP TFAs: Resource Distribution & Technical Support)

Goal “The district will provide appropriate instructional resources, support services, and functional and safe facilities.”

Objectives 1) “To develop a comprehensive plan by April 2010 that integrate data management systems for administrative functions (such as student information, attendance, grading system, library catalog, etc.),” and/or 2) “At least 80% of personnel and students indicate use of appropriate and safe technology tools and resources that promote personal, academic, and career needs as measured by [MSIP AQ].”

Strategies and/or action steps

- District will [use the AQ or develop an instrument] to assess the extent that personnel and students use appropriate and safe technology tools and resources to address personal, academic, and career needs, in a safe and responsible manner. (MSIP 8.5, 8.10, 8.11) (METSP R1, TS1, A2, S1, S2, T1, T2, A2)
- District will provide equitable access to appropriate technology tools and resources that are varied and diverse and facilitate differentiated instruction (including electronic resources, assistive technologies, and technology-assisted alternative learning environments). (MSIP 6.2, 6.3, 6.4, 6.8, and 7.1, 7.2, 7.3, 7.4, 7.5, 7.6) (METSP R1, TS1, A2, S1, T1,)
- District will establish/update technology policies and procedures related to technology hardware, software, connectivity, and technical support standards, including student and educator technology literacy standards (replacement cycle, acceptable use, and Internet filtering, recovery and security systems). (MSIP 6.4, 6.7, 6.8, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 8.1, 8.2, 8.3, 8.6, 8.7) (METSP A2, R1, TS1, S2, T2)
- District will use appropriate technology tools and resources for data collection and analyses to determine district needs and monitor progress. (MSIP 6.2, 6.3, 6.8, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 8.7) (METSP A2)

CSIP Goal: Increase Parent and Community Involvement (METSP TFA: Administration, Data Management, and Communications)

Goal “The district will promote, facilitate, and enhance parent, student, and community involvement.”

Objective “By June 2010, the district will develop a comprehensive plan that integrates technology-driven communication tools for parent access to student and public information and communication tools for employee and school business (district Intranet for access to forms, applications, announcements, and such).”

Strategies and/or action steps

- District will provide opportunities for parents and community to observe and use instructional technology; will involve a broad, diverse section of the community on the CSIP (and/or technology) planning committee; and will use technology to facilitate interactive communications among district staff, parents, and community members. (MSIP 7.5, 7.6, 8.2, 8.3, 8.8, 8.9) (METSP A1, A2)
- District will provide parents and community members with opportunities to visit instructional rooms and view student work that makes effective use of technology; district will provide opportunities for parents and community members to use district technology tools and resources to develop new skills to meet their continuing education needs. (MSIP 7.6, 8.3, 8.8, 8.9) (METSP A2)
- District will integrate technology into the CSIP planning process; the technology committee members will include parents and community members. (MSIP 8.3, 8.8, 8.9) (METSP A1)
- District will use technology tools and resources to disseminate school news and student work and to facilitate input and feedback from parents and community members (email, website, electronic newsletter, online homework assignments, online progress reports, online surveys, automated absentee system, etc.) (MSIP 7.5, 7.6, 8.8, 8.9) (METSP A2)

CSIP Goal: Governance (METSP TFA: Administration, Data Management, and Communications)

Goal “The district will govern in an effective and efficient manner, providing leadership and representation to benefit staff, students, parents, and patrons.”

Objectives 1) “By January 2011, the district will increase access to resources by refining the process for identifying and allocating funds for acquiring academic software to meet improvement plan goals,” and/or 2) “To develop and implement new integrated data management system to improve operational efficiency of instructional programs.”

Strategies and/or action steps

- The district will implement effective and efficient administration, data management, and communication processes through the use of technology that further supports teaching and learning. (MSIP 6.2, 6.3, 6.7, 7.1, 7.2, 7.3, 8.1, 8.2, 8.6, 8.7, 8.9, 8.11) (METSP A1, A2)
- District will employ/designate technology leadership position to oversee and coordinate efforts of a representative committee that helps govern the district’s technology implementation, planning, and evaluation efforts. (MSIP 6.1, 6.3, 6.4, 6.7, 6.8, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 8.1, 8.2, 8.3, 8.6, 8.7) (METSP A1)
- District will establish/update effective long-range strategies detailing how technology tools and resources support teaching, learning, and administrative activities and help meet the goals and objectives of the district’s comprehensive school improvement plan. (MSIP 6.1, 6.2, 6.3, 6.4, 6.7, 6.8, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 8.1, 8.2, 8.3, 8.6, 8.7) (METSP A1)
- District will establish/maintain a sufficient budget to cover Total Cost of Ownership (a budget line item for technology based on a set percentage rate of the overall budget or per-pupil expenditure). (MSIP 6.4, 6.8, 8.8) (METSP A2)